

October 18, 2002

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
 Fisheries Division
 Endangered Species Coordinator
 Native Species Coordinator, Fisheries
 Water Resources Coordinator
 Missoula Office
Montana Department of Natural Resources and Conservation
MT Environmental Information Center
Montana Audubon Council
State Historic Preservation Office
Lewis and Clark County Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
Montana State Library, Helena
Big Blackfoot Chapter, Trout Unlimited, Box 1, Ovando, MT 59854
Charles E. Grantier, P.O. Box 817, Lincoln, MT 59639

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Improvement Project tentatively planned to improve in-stream flows in lower Poorman Creek, a tributary to the Blackfoot River located approximately 2 miles south of the town of Lincoln, Montana.

Please submit any comments that you have by 5:00 P.M., November 18, 2002 to Montana Fish, Wildlife and Parks in Helena at the address listed above. Completion of this proposed project is contingent upon approval of a "Change" application by the Montana Department of Natural Resources and Conservation, as well as approval of a potential water lease agreement by the Fish, Wildlife and Parks Commission. Please note that this draft Environmental Assessment will be considered as final if no substantive comments

*Lewis & Clark
Future Fisheries*

are received by the deadline listed above. If you have any questions, please feel free to contact me as (406) 444-2432.

Sincerely,

Mark Lere
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@mt.state.us

Montana Fish, Wildlife and Parks Fisheries Division
ENVIRONMENTAL ASSESSMENT For Routine Actions with Limited Environmental Impact

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

1. *Applicant/Contact name and address:* Mr. Charles E. Grantier
PO Box 817
Lincoln, MT 59639
2. *Type of action:* Irrigation conversion from flood to sprinkler; change point of diversion (two sites) and change of use from irrigation to instream flow: water right No. 76F -W-097790-00 and No. 76F -W-097787-00
2. *Water source name:* Poorman Creek, tributary to the Blackfoot River near Lincoln Montana
3. *Location affected by action:* T14N, R9W, Sec. 25 and 26
5. *Narrative summary of the proposed project, purpose, action to be taken, and objectives:*

The project outlined in this EA will correct the majority of identified fisheries problems in lower Poorman Creek by working cooperatively with Mr. Charles Grantier. Mr. Grantier is the largest landowner in the lower Poorman Creek basin and has senior irrigation water rights for lower Poorman Creek. The project entails the conversion of flood to sprinkler (70 acre pivot) including 1) a proposed change in point of irrigation diversion and 2) a conversion of irrigation salvage water to either a) an FWP water lease or b) an instream flow use. Salvage water, intended to augment stream flows, will benefit native fish occupying both Poorman Creek and the Blackfoot River. In addition to these irrigation changes, the project entails improved riparian grazing and the replacement of undersized culverts with bridges.

Objectives of the restoration project are 1) reduce irrigation impacts (fish losses to irrigation ditches and chronic dewatering) to fish populations by converting from flood to sprinkler irrigation, 2) improve riparian health and streambank stability and aquatic habitat conditions by implementing a compatible riparian grazing system, and 3) remove two undersized culverts that restrict fish passage and replacing them with bridges, 4) improve crop yields and livestock forage, and 5) minimize long-term electrical costs.

The irrigation conversion – the largest project element will: 1) convert flood to sprinkler (1/4 mile center pivot) on the east side of Poorman Creek, 2) consolidate two ditches (and two diversion points) into one pipeline, which will then serve both pivots, and 3) screen the pipe intake to eliminate fish losses. By moving the new point of diversion upstream (from T14N, R9W, Section 25d to T14N, R9W, Sec. 26a) and piping gravity-feed water to the new pivot, the upgraded irrigation system is also designed to minimize long-term electrical costs to the landowner. Water salvaged from this operation (i.e. that which is actually consumed and not part of return flow) would either be leased to FWP or converted to instream flows to remain with the water right holder. Because there are no other water users on Poorman Creek between Grantier's points of diversion and its confluence with Grantier Spring Creek, there should not be any adverse affect to existing water users on the source of supply.

The water right claims that would be involved in are as follows:

Right No.	Purpose	Flow Rate	Priority Date
76F -W-097790-00	IR	17.85 C for 5305afy	07/22/1889
76F -W-097787-00	IR	23.00 C 6900afy	07/22/1889

There are approximately 27 other water rights claimed in the basin (upstream of the Grantier Spring Creek confluence) that are junior to the Grantier rights. Fourteen of those claims are for stockwater, 5 are for irrigation, 5 are for domestic use, 3 are for mining, and one is for logging. Most of the stockwater rights are held by the Forest Service and represent a negligible depletion from the stream. The remaining irrigation claims add up to less than 2.25 cfs. The mining claims comprise 5.0 cfs.

Poorman Creek is one of only two Garnet Mountain streams known to support bull trout spawning. In addition, Poorman Creek supports a population of westslope cutthroat trout, along with brook trout and brown trout in the lower reaches. This project will improve the ability of fish to migrate upstream and downstream. This will in turn improve recruitment of native fish to a section of the Blackfoot river that is getting increased angler use, and should enhance Poorman Creeks use for bull trout spawning. While the reach immediately affected by this project will be approximately 1.5 miles, the benefits through improved migration will extend not only to upper Poorman Creek, but also to the Blackfoot.

While the claimed rights are for 17.85 and 23.00 cfs respectively, actual diversion in 2001 ranged from 6.6 to 1.3 cfs at the upper headgate and from .6 to 4.7 cfs at the lower headgate. The highest combined diversion rate of these two headgates

was 8.8 cfs. (Lower Poorman Creek Hydrological Assessment DNRC Report WR-3.C.2.1LPC, Table 1) While 2001 was an exceptionally dry year and irrigation diversions might well be higher in wet years, it indicates what might be salvageable in a low flow year.

There are two mining rights with priority dates senior to Grantier's irrigation claims. These mining claims describe the rights as a "flow-through, non-consumptive use." As such these rights should be of no consequence to the efficacy of any lease or conversion.

DNRC shall issue an authorization to change a water right if the applicant meets the criteria outlined in MCA 85-2-402.

4. *Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)*

DNRC-Mike McLean FWP-Ron Pierce, Kathleen Williams and Mark Lere USFWS-Greg Neudecker, NRCS-Dave Spangler,

The Natural Resource Conservation Service (NRCS) designed the irrigation conversion. The Montana Fish, Wildlife and Parks (FWP), the U.S. Fish and Wildlife Service (USFWS), Big Blackfoot Chapter of Trout Unlimited (BBCTU) along with the NRCS and landowner are contributing funds and other resources to the overall project. The Department of Natural Resources and Conservation (DNRC) has completed a hydrologic assessment of the project area (DNRC Report WR-3.C.2.1LPC).

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.* Lower Poorman Creek is chronically dewatered on the Grantier Ranch due to irrigation and natural seepage to alluvium. This water conservation project will enhance stream flow conditions in the lower mile of Poorman Creek and the Blackfoot River below the Poorman confluence.

Determination: No significant impact

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality. The project will require a 310 or 124 permit for the culvert replacements and the new diversion. These permits will stipulate minimal adverse impacts to the bed and banks of Poorman Creek. Poorman Creek is currently a water quality impaired stream on the Montana 303(d) list and is included on the development upper Blackfoot TMDL. This project will correct TMDL concerns on the Grantier ranch by improving stream flows and water quality by incorporating compatible riparian grazing practices (NRCS riparian CRP buffer) as part of the overall project.

Determination: No significant impact

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Sections of lower Poorman Creek are naturally intermittent during low flow periods. The project will restore natural surface and groundwater interactions. At this point, the amount of water consumed under the existing irrigation use has not been computed. However, loss of seepage from the ditches is relatively minor (Lower Poorman Creek Hydrological Assessment, DNRC Report figure 5). This study indicates that seepage from the upper diversion (which will be discontinued) flows away from Poorman Creek and into the Blackfoot river flood plain. As a result, virtually all the water diverted by the upper diversion does not return to Poorman Creek. In addition, the lower end of the creek (above Grantiers Spring Creek, showed little or no flow late in the season, indicating that a negligible amount of flow was making it from the ditches back to Poorman. Thus, based on the limited information available, it would appear that it should be possible to claim a substantial portion of the water diverted as salvage. The proposed action would have a positive effect to surface water flows in lower Poorman Creek above the confluence with Grantier Spring Creek. The loss of groundwater recharge to the Blackfoot River floodplain from discontinued use of the upper Poorman ditch would be compensated by the increased late season flows in lower Poorman Creek resulting from this change in water use.

Determination: Not applicable-surface water change

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No impacts. The conversion and operation of the new diversion and center pivot are designed to 1) improve fish passage problems, 2) improve channel stability, 3) remove instream dams, and 4) augment flows to lower Poorman Creek. The irrigation system is designed by the NRCS in consultation with FWP, USFWS, BBCTU, DNRC and the landowner. Water would be delivered to the pivots at a maximum rate of 2.4 cfs. Under current irrigation management, measured diversions in 2001 (a drought

year) ranged between 3.1 and 8.6 cfs (DNRC 2001). The proposed change does not require any construction of new dams and/or wells. The project is designed to enhance riparian areas along Poorman Creek, and to remove barriers (undersized culverts) that inhibit fish migration.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Poorman Creek is one of only two Garnet Mountain streams known to support bull trout spawning. Bull trout are considered "threatened" under the ESA. Because Poorman Creek supports bull trout, the project will be included in Montana Fish, Wildlife and Park's Section 6 conservation plan with the USFWS. Poorman Creek also supports westslope cutthroat trout - a species of special concern in Montana. Both of these imperiled native species are expected to benefit though the elimination of fish losses to ditches, improved fish passage, restoring stream flows and improved overall habitat conditions resulting from the project.

Lynx, bald eagle and grizzly bear are also ESA threatened species present in the area. These species likewise expected to benefit from improvements in the health and diversity of the Poorman Creek riparian area (personal communication Bob Henderson, FWP wildlife biologist). Lynx will likely benefit from an increase in habitat for the primary for snowshoe hare - a species likely to benefit from increased "cover" associated the change in riparian grazing. Foraging opportunities for the bald eagle, which inhabit the adjacent Blackfoot River corridor, will likely improve with increased recruitment of fish to the river. Grizzly bears and wolverine, occasionally pass through the area, and would likely benefit from increased vigor and health of the riparian community. Other sensitive species likely to benefit include fisher and flammulated owls, both of which rely on mature Cottonwood and Ponderosa Pine and related shrub communities in the area.

Determination: No impact

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: Not applicable-no wetlands involved with this project

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: Not applicable. There are no ponds associated with this project

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

The predominant soil types irrigated by the applicant are Stady-Wabex Complex silt loams and Silver City-Wabex gravelly loams. These soil types were identified using NRCS data for Lewis and Clark County. Stady and Wabex soils contain no salt. Silver City soils contain minimal amounts of salt between 24 and 60 inches. Saline seep has not been identified as occurring on these soil types. The applicant proposes to switch from flood to sprinkler irrigation. Sprinkler irrigation will result in a more controlled application of water, thus reducing the likelihood of leaching minerals and salts in the soil through over application of water from flood irrigation. Further, the applicant seeks to improve riparian habitat along Poorman Creek, which will further reduce the likelihood of soil instability.

Determination: No significant impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

The existing vegetative cover consists of irrigated pasture and cropland, and riparian vegetation along Poorman Creek. The construction of a new point of diversion and buried mainline will not alter existing vegetative cover, as the vegetation receives irrigation water, and is already controlled by the applicant through agricultural practices. The applicant proposes to improve the riparian vegetation along Poorman Creek. The applicant will be responsible for controlling noxious weeds on his property.

Determination: No significant impact

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

During construction there will be a short-term deterioration of air quality due to increased noise levels from heavy machinery operation. There is also the potential for the creation of fugitive dust from operation of heavy machinery, however, both sources will occur for a very limited amount of time. Upon completion of the project there will be no adverse effects to air quality. There were no sources of pollutants identified that may adversely effect existing vegetation.

Determination: No significant impact

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project. Because the irrigation project will be partially funded by Federal sources (NRCS – EQUIP*

program), a cultural resources survey has been completed per NRCS policies and procedures.

Determination: No impact

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No significant impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: The project is consistent with Blackfoot River restoration activities undertaken throughout the watershed

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: The project will improve recreational activities (angling) by helping to restore native fish populations in the Blackfoot River.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No significant impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No_X_. *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? No significant impact

(b) Local and state tax base and tax revenues? No significant impact

- (c) Existing land uses? Land use remains agricultural
 - (d) Quantity and distribution of employment? No significant impact
 - (e) Distribution and density of population and housing? No significant impact
 - (f) Demands for government services? No significant impact
 - (g) Industrial and commercial activity? No significant impact
 - (h) Utilities? No significant impact
 - (i) Transportation? No significant impact
 - (j) Safety? No significant impact
 - (k) Other appropriate social and economic circumstances? No significant impact
2. **Secondary and cumulative impacts on the physical environment and human population:** No adverse secondary for cumulative impacts have been identified.
3. **Describe any mitigation/stipulation measures:** None
4. **Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:**

No alternatives to this proposed project have been identified.

There are no other alternative for other other water leases, conversions of irrigation use instream flows in the Poorman Creek drainage. At this time, no other opportunities are available for restoration of bull trout in the area.

The no action alternative would result in the applicant to continue to divert water from Poorman Creek through the existing headgate and ditch system

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: There are no significant impacts identified, therefore and EIS is not required.

Name of person(s) responsible for preparation of EA:

Name: Ron Pierce

Title: Fisheries Biologist, Montana Fish, Wildlife and Parks

Date: October 10, 2002